1.      (Amended) A method for detecting an anomaly on a top surface of a substrate, or within the substrate, comprising:

directing a first radiation beam having a first ultraviolet or deep ultraviolet wavelength to illuminate a first spot on the top surface of the substrate at a first non-zero angle measured from a normal direction to the top surface;

directing a second radiation beam having a second wavelength to illuminate a second spot on the top surface of the substrate at a second angle measured from a normal direction to the top surface, wherein the second wavelength is not equal to the first wavelength;

causing relative motion between the first and second radiation beams and the top surface of the substrate so that the spots scan paths on the top surface;

detecting radiation from the first radiation beam scattered by the top surface in the first spot to provide a single output corresponding to a position of the first spot on the top surface; and

detecting radiation from the second radiation beam scattered by the top surface in the second spot to provide a single output corresponding to a position of the second spot on the top surface.

2.      Cancelled.

3.      The method of claim 1, further comprising documenting the presence of an anomaly if the detected radiation shows that the first radiation beam was scattered upon interacting with the top surface.

4.      The method of claim 1, further comprising documenting the presence of an anomaly if the detected radiation shows that the second radiation beam was scattered upon interacting with the top surface.

5.      The method of claim 1, further comprising comparing radiation detected from the first radiation beam to radiation detected from the second radiation beam to determine whether the anomaly comprises a COP or a particle.

6. The method of claim 1, wherein the first wavelength is around 266 nanometers.

7. The method of claim 1, wherein the first wavelength is around 355 nanometers.

8. The method of claim 1, wherein the first wavelength is a wavelength in the ultraviolet spectrum of radiation.

9. The method of claim 1, wherein the second wavelength is around 532 nanometers.

10. The method of claim 1, wherein the second wavelength is a wavelength in the visible spectrum of radiation.

11. The method of claim 1, wherein the first wavelength is around 266 nanometers and the second wavelength is around 532 nanometers.

12. The method of claim 1, wherein the first wavelength is around 355 nanometers and the second wavelength is around 532 nanometers.

13. The method of claim 1, wherein the first wavelength is in the ultra-violet spectrum of radiation and the second wavelength is in the visible spectrum of radiation.

14. (Amended) The method of claim 1, wherein the first angle is around 70 degrees to a normal direction to the top surface.

15. The method of claim 1, wherein the second angle is around zero degrees to a normal direction to the top surface.

16. The method of claim 1, wherein the directing of a first radiation beam and the directing of a second radiation beam are performed simultaneously.

17. The method of claim 1, wherein the detecting of radiation from the first radiation beam and the detecting of radiation from the second radiation beam are performed simultaneously.

18.   The method of claim 1, wherein the first radiation beam comprises a laser beam.

19.   The method of claim 1, wherein the second radiation beam comprises a laser beam.

20.   The method of claim 1, wherein the detecting of radiation from the second radiation beam comprises detecting scattered radiation from the second radiation beam and avoiding reflected radiation from the second radiation beam.

21.   The method of claim 2, further comprising documenting the presence of an anomaly if the detected radiation shows an increase in the amount of scattered radiation produced by the first radiation beam.

22.   The method of claim 2, further comprising documenting the presence of an anomaly if the detected radiation shows an increase in the amount of scattered radiation produced by the second radiation beam.

23.   (Amended)  A method for detecting an anomaly on a top surface of a substrate, or within the substrate, comprising:

directing a first radiation beam having a first wavelength to illuminate a first spot on the top surface of the substrate at a first non-zero angle measured from normal, wherein the first wavelength is in the ultraviolet spectrum of radiation;

directing a second radiation beam having a second wavelength to illuminate a second spot on the top surface of the substrate at a second angle measured from normal, wherein the second wavelength is in the visible spectrum of radiation;

detecting radiation from the first and second radiation beams;

causing relative motion between the first and second radiation beams and the top surface of the substrate, so that the spots scan paths on the top surface, wherein said detecting detects radiation scattered by the top surface in the first and second spots to provide a first single output in response to the scattered radiation in the first beam corresponding to a position of the first spot on the top surface in one of the scan paths, and a second single output

in response to the scattered radiation in the second beam corresponding to a position of the second spot on the top surface in one of the scan paths; and

documenting the presence of an anomaly if the detected radiation shows an increase in the amount of scattered radiation produced by the first radiation beam or the second radiation beam.

24.     (Amended)  A system for detecting an anomaly on a top surface of a substrate, or within the substrate, comprising:

a device providing a first wavelength radiation and a second wavelength radiation to illuminate the top surface, said first wavelength being ultraviolet or deep ultraviolet;

optics focusing the first wavelength radiation into a first radiation beam at an oblique first angle to the top surface to illuminate a first spot on the top surface and focusing the second wavelength radiation into a second radiation beam at a second angle to a normal direction to top surface to illuminate a second spot on the top surface;

means for causing relative motion between the first and second radiation beams and the top surface of the substrate, so that the spots scan paths on the top surface; and

a detector mounted to detect radiation scattered by the top surface in the first or second spot to provide a first single output in response to the scattered radiation in the first beam corresponding to a position of the first spot on the top surface in one of the scan paths, and a second single output in response to the scattered radiation in the second beam corresponding to a position of the second spot on the top surface in one of the scan paths.

25.     The system of claim 24, further comprising a beamsplitter to separate the first radiation beam from the second radiation beam.

26.     (Amended)  The system of claim 24, further comprising a collector that is rotationally symmetric about a line and that is operable to collect radiation and focus the radiation onto the detector.

27.     The system of claim 24, wherein the radiation source is provided by a laser source.

28.     The system of claim 24, wherein the first wavelength is around 266 nanometers.

29.     The system of claim 24, wherein the first wavelength is around 355 nanometers.

30.     Cancelled.     31.     The system of claim 24, wherein the second wavelength is around 532 nanometers.

32.     The system of claim 24, wherein the second wavelength is a wavelength in the visible spectrum of radiation.

33.     The system of claim 24, wherein the first wavelength is around 266 nanometers and the second wavelength is around 532 nanometers.

34.     The system of claim 24, wherein the first wavelength is around 355 nanometers and the second wavelength is around 532 nanometers.

35.     The system of claim 24, wherein the first wavelength is a wavelength in the ultraviolet spectrum of radiation and the second wavelength is a wavelength in the visible spectrum of radiation.

36.     (Amended) The system of claim 25, further comprising at least one mirror mounted to direct the first radiation beam at the top surface and to direct the second radiation beam at the top surface.

37.     (Amended) The system of claim 25, wherein the first beam is around 70 degrees measured from a normal direction to the top surface.

38.     (Amended) The system of claim 25, wherein the second angle is around zero degrees from a normal direction to the top surface.

39.     The system of claim 27, wherein the laser source is a solid-state laser.

40.     The system of claim 27, wherein the laser source can vary the wavelength of emitted radiation using one or more crystals.

41.    The method of claim 1, further comprising comparing radiation detected from the first radiation beam to radiation detected from the second radiation beam to determine whether the anomaly is located on the top surface or below the top surface of the substrate.

42.    (Amended)  A method for detecting an anomaly only on a top surface of a substrate, comprising:

directing a first ultraviolet radiation beam at the top surface of the substrate at a first angle measured from the normal direction to the top surface;

directing a second ultraviolet radiation beam at the top surface of the substrate at a second angle different from the first angle measured from the normal direction to the top surface;

detecting ultraviolet radiation from the first ultraviolet radiation beam; and

detecting ultraviolet radiation from the second ultraviolet radiation beam.

43.    The method of claim 42, wherein the first and second ultraviolet radiation beams have a wavelength of around 266 nm.

44.    The method of claim 42, wherein the first and second ultraviolet radiation beams have a wavelength of around 355 nm.

45.    The method of claim 42, wherein the substrate comprises a silicon-on-insulator wafer.

46.    (New)  A method for detecting an anomaly on a surface of a substrate, or within the substrate, comprising:

directing a first radiation beam to illuminate a first spot on the surface of the substrate at an oblique angle to the surface, said first beam having a ultraviolet or deep first ultraviolet wavelength;

causing relative motion between the first radiation beam and the surface of the substrate so that the first beam scans a path on the surface; and

detecting radiation from the first radiation beam scattered by the surface in the spot to provide a single output in response to the scattered radiation in the beam corresponding to a position of the first spot on the surface in the scan path.

47.　(New)　The method of claim 46, wherein said causing causes rotational and translational relative motion between the first radiation beam and the surface of the substrate.

48.　(New)　The method of claim 46, further comprising directing a second radiation beam having a second wavelength to illuminate a second spot on the surface of the substrate at a second angle measured from the normal direction to the surface, wherein the second wavelength is not equal to the first wavelength.

49.　(New)　The method of claim 48, further comprising comparing radiation detected from the first radiation beam to radiation detected from the second radiation beam to determine whether the anomaly comprises a COP or a particle.

50.　(New)　The method of claim 48, wherein the second wavelength is around 532, 266 or 355 nanometers.

51.　(New)　The method of claim 48, wherein the second wavelength is a wavelength in the visible spectrum of radiation.

52.　(New)　The method of claim 48, wherein the first wavelength is around 266 or 355 nanometers and the second wavelength is around 532 nanometers.

53.　(New)　The method of claim 48, wherein the first wavelength is in the ultra-violet spectrum of radiation and the second wavelength is in the visible spectrum of radiation.

54.　(New)　The method of claim 48, wherein the second angle is around zero degrees.

55.　(New)　The method of claim 48, wherein the directing of a first radiation beam and the directing of a second radiation beam are performed sequentially or simultaneously.

56.　(New)　The method of claim 48, wherein the detecting of radiation from the first radiation beam and the detecting of radiation from the second radiation beam are performed simultaneously.

57.    (New)  The method of claim 48, wherein the detecting of radiation from the second radiation beam comprises detecting scattered radiation from the second radiation beam and avoiding reflected radiation from the second radiation beam.

58.    (New)  The method of claim 48, further comprising documenting the presence of an anomaly if the detected radiation shows an increase in the amount of scattered radiation produced by the second radiation beam.

59.    (New)  The method of claim 48, wherein said directing directs the second beam to a low-k dielectric material, said second beam containing a wavelength in a visible range.

60.    (New)  The method of claim 48, further comprising comparing radiation detected from the first radiation beam to radiation detected from the second radiation beam to determine whether the anomaly is located on the top surface or below the top surface of the substrate.

61.    (New)  The method of claim 48, wherein the relative motion causes the second radiation beam to scan a path on the surface, said method further comprising registering the scan paths of the spots illuminated by the first and second radiation beams.

62.    (New)  The method of claim 46, further comprising documenting the presence of an anomaly if the detected radiation shows an increase in the amount of scattered radiation produced by the first radiation beam.

63.    (New)  The method of claim 46, wherein the first beam is at an angle of around 70 degrees from a normal direction to the surface.

64.    (New)  The method of claim 46, further comprising collecting radiation from the first radiation beam scattered by the surface in the spot by means of a radiation collector having an axis of rotational symmetry about a line, said collector focusing scattered radiation from the surface to the detector to produce the single output.

65.    (New)  The method of claim 46, wherein said directing directs the beam to the surface of a silicon-on-insulator wafer, and the detecting detects radiation scattered by the silicon-on-insulator wafer.

66.    (New)  The method of claim 46, wherein said directing directs the beam to the surface of an unpatterned semiconductor wafer.

67.    (New)  An apparatus for detecting an anomaly on a surface of a substrate, or within the substrate, comprising:

optics directing a first radiation beam to illuminate a first spot on the top surface of the substrate at an oblique angle to the surface, said first beam having a ultraviolet or deep first ultraviolet wavelength;

means for causing relative motion between the first radiation beam and the surface of the substrate so that the first beam scans a path on the surface;  and

a detector detecting radiation from the first radiation beam scattered by the surface in the spot to provide a single output in response to the scattered radiation in the beam corresponding to a position of the first spot on the surface in the scan path.

68.    (New)  The apparatus of claim 67, wherein said causing means comprises an instrument that causes rotational and translational relative motion between the first radiation beam and the surface of the substrate.

69.    (New)  The apparatus of claim 67, further comprising means for directing a second radiation beam having a second wavelength to illuminate a second spot on the surface of the substrate at a second angle measured from the normal direction to the surface, wherein the second wavelength is not equal to the first wavelength.

70.    (New)  The apparatus of claim 69, further comprising means for comparing radiation detected from the first radiation beam to radiation detected from the second radiation beam to determine whether the anomaly comprises a COP or a particle.

71.    (New)  The system of claim 69, further comprising a beamsplitter to separate the first radiation beam from the second radiation beam.

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72.    (New)  The system of claim 69, wherein the first wavelength is around 266 or 355 nanometers and the second wavelength is around 532 nanometers.

73. (New) The system of claim 69, wherein the first wavelength is a wavelength in the ultraviolet spectrum of radiation and the second wavelength is a wavelength in the visible spectrum of radiation.

74. (New) The system of claim 73, further comprising at least one mirror mounted to direct the first radiation beam at the surface at a first angle measured from normal and to direct the second radiation beam at the surface at a second angle measured from normal.

75. (New) The system of claim 69, wherein the second angle is around zero degrees.

76. (New) The system of claim 67, further comprising a collector having an axis of rotational symmetry about a line, said collector receiving and directing scattered radiation to the detector to produce the single output.

77. (New) The system of claim 67, wherein the optics comprises a laser source.

78. (New) The system of claim 67, wherein the first wavelength is around 266 or 355 nanometers.

79. (New) The system of claim 67, wherein the first beam is at an angle of around 70 degrees from a normal direction to the surface.

80. (New) The system of claim 67, wherein the optics comprises a solid-state laser.

81. (New) A method for detecting an anomaly on a surface of a substrate comprising a low k dielectric material, or within the substrate, comprising:

directing a first radiation beam having a first wavelength to illuminate a first spot on the surface of the substrate at a first angle measured from the normal direction to the surface;

directing a second radiation beam having a second wavelength to illuminate a second spot on the surface of the substrate at a second angle measured from the normal direction to the surface, wherein the two beams reach the low k dielectric material, and wherein the two wavelengths are not equal and are in a visible range;

detecting radiation from the first radiation beam scattered by the top surface in the first spot; and

detecting radiation from the second radiation beam scattered by the top surface in the second spot.

82.     (New)  The method of claim 81, further comprising causing relative motion between the first and second radiation beams and the surface of the substrate so that the beams scan paths on the surface, wherein the detecting detects radiation from the first radiation beam scattered by the surface in the first spot to provide a first single output in response to the scattered radiation in the first beam corresponding to a position of the first spot on the surface in one of the scan paths, and to provide a second single output in response to the scattered radiation in the second beam corresponding to a position of the second spot on the surface in one of the scan paths.

83.     (New)  The method of claim 23, wherein said directing directs the beam to the surface of a silicon-on-insulator or unpatterned semiconductor wafer, and the detecting detects radiation scattered by the silicon-on-insulator or unpatterned semiconductor wafer.

84.     (New)  The method of claim 1, wherein said directing directs the beam to the surface of an unpatterned semiconductor wafer.

85.     (New)  The method of claim 1, further comprising registering the scan paths of the spots illuminated by the first and second radiation beams.